

Claims

1. A voice input system comprising a stationary central unit (1) and a mobile voice interface (2), wherein the central unit (1) has means for receiving voice signals communicated via a wireless link and means for evaluating these voice signals to recognize spoken words, also interfaces (4a, 4b, 4c) which, depending on recognized words, generate switching or regulation signals which they transmit to external appliances, and wherein the voice interface (2) has two or more microphones (3a, 3b, 3c), which are combined to form a microphone array, and also means for the wireless transmission of the signals generated by the microphone array to the central unit (1).
2. A voice input system according to claim 1,
characterized in that
the voice interface (2) has means for electronically processing the signals generated by the microphones (3a, 3b, 3c) of the microphone array.
3. A voice input system according to claim 2,
characterized in that
the electronic processing causes a change in the respective signal levels (amplification, attenuation, AGC) and/or frequency components (high-pass, low-pass, band-pass filters) and/or the respective signal phases.
4. A voice input system according to one of the claims 2 or 3,
characterized in that
the means for the electronic processing also contain means for converting analog signals to digital signals.
5. A voice input system according to one of the claims 1 to 4,
characterized in that
the voice interface (2) has means for receiving signals communicated from the central unit (1) over a wireless link (e.g. IR, radio).
6. A voice input system according to one of the claims 2, 3 or 4,
characterized in that

the voice interface (2) has means for receiving control signals communicated from the central unit (1) over a wireless link (e.g. IR, radio) with which the central unit (1) can influence the means for electronically processing the voice interface (2).

7. A voice input system according to one of the claims 1 to 6,
characterized in that
the means of the central unit (1) for evaluating the voice signals are implemented as a processor system (EDP).
8. A voice input system according to claim 7,
characterized in that
the processor system stores user-specific data (e.g. individual voice commands, voice parameters) and makes use thereof to evaluate the voice signals and/or to generate individually assigned control signals.
9. A voice input system according to one of the claims 1 to 8,
characterized in that
the microphone array (3a, 3b, 3c) has a directional characteristic such that sound is preferentially recorded from one direction.
10. A voice input system according to claim 9,
characterized in that
the directional characteristic can be altered by processing the signals generated by the microphones (3a, 3b, 3c) of the microphone array using beam forming algorithms (e.g. the Griffith or Frost beam former).
11. A voice input system according to claim 10,
characterized in that
the directional characteristic is changed such that it follows a spatial displacement of the sound source (speaker tracking).
12. A voice input system according to one of the claims 1 to 11,
characterized in that
the individual microphones (3a, 3b, 3c) of the array have a directional characteristic (e.g. cardioid, figure of eight).